Remarks

In view of the foregoing amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

New claim 10 has been introduced. Descriptive support for the subject matter of claim 10 is supported at page 4, lines 16-25, and page 9, lines 9-18. Page 4, lines 16-25 indicates that "almost all of the data (but for possible the very last) that was stored can actually be used" even if the EPG transmission is interrupted or the memory capacity of the receiving device is exceeded. No new matter has been introduced.

The amendments to claim 1 are supported by the description of the invention at page 1, lines 1-6; page 4, lines 18-24; page 6, line 11 to page 7, line 9; page 8, lines 12-32; page 9, lines 6-12, where the description of the "reading" and "parsing" functions inherently requires the presence of a processor to execute these functions, and storage in memory is explicitly recited. No new matter has been introduced.

Claims 1-5, 7, 8, and 10 are pending.

The rejection of claims 1-5, 7, and 8 under 35 U.S.C. § 102(e) as anticipated by U.S. Patent Application Publ. No. 2002/0129366 to Schein et al. ("Schein") as evidenced by U.S. Patent No. 5,353,121 to Young ("Young") is respectfully traversed.

Schein teaches an electronic program guide (EPG), and identifies an array of possible user features that can be selected by the viewer via the EPG. One of the possible features is the ability for the viewer to identify when the same program may be viewed at different times on the same channel and/or other channels. This can be done by selecting a particular option on the EPG via remote control. For this feature to be provided, schedule data will have been transmitted to the broadcast data receiver and will be associated with the particular program to which the schedule data relates. Schein discloses that transmission of vertical blanking information (including program related information), program guide, and conditional access information "are provided as separate bit streams" (see paras. 0053 and 0054). Thus, Schein teaches away from interleaving data transmission as presently claimed.

At pages 3 and 4 of the office action (as well as in the Advisory Action dated March 23, 2009), the U.S. Patent and Trademark Office ("PTO") emphasizes that Schein discloses that the "schedule information is transmitted as a set of short commands of specified formats" (citing Schein paragraph 0057). However, this paragraph of Schein merely indicates

that the schedule information is transmitted via separate commands for purposes of communicating "a show schedule for a given channel, the title of each show in the schedule, descriptions and information attributes about each show in the channel." Schein does not explicitly identify *how* this data is transmitted, except that it is transmitted *separately*. Schein indicates that the collection of data for a show is transmitted using ID numbers in the commands to facilitate organization of the information into a relational database. This suggests, if anything, that the different classes of data are transmitted separately and then integrated by the receiver.

This is directly contrary to the manner in which the present invention operates, because the separate transmission of data described by Schein would suffer the same problems that the present invention is intended to overcome (i.e., disruption of transmission or insufficient memory would render records incomplete).

As recited in the present application at page 2, lines 25-27, the term "interleaved"—as it is recited in the present claims—means that "each program record is followed or preceded by the corresponding schedule records before or after a subsequent program record is coded and/or transmitted." Schein neither mentions that the program and schedule data are transmitted in an interleaved manner, nor describes this process.

The PTO asserts at page 3 of the office action that Young, because it is incorporated by reference into Schein, overcomes this deficiency. In particular, the PTO cites Young for teaching "schedule information…transmitted in an interleaved matter (see Young, there is a concept of a guide session which allows the user to open the background guide repeatedly, interleaved with nonbackground guide activities)." The portions of Young cited in support of this assertion are col. 24, lines 9-12; col. 15, lines 30-35; col. 15, lines 54-56; and col. 18, lines 47-52.

Applicants respectfully traverse the rejection because Young does *not* teach a method of coding and/or transmitting EPG data that involves the interleaving of *data* as claimed. Young teaches an EPG type schedule system utilizing a background display, in which the background schedule information can be displayed over a portion of a television screen in response to activation of the EPG.

Young recites at col. 24, lines 9-13 that "In the present invention, there is a concept of a guide session which allows the user to open the background guide repeatedly, interleaved with nonbackground guide activities, such as watching TV or using the foreground guide." The only similarity between the present invention and the cited description in Young

concerns the mere use of the word "interleaved." This term "interleaved," as used in Young, refers to the user's behavior and not to any method of coding and/or transmitting EPG data as in the present invention—in Young the guide can be opened in multiple interleaved windows that appear on the display. This is akin to using a Windows™ display in which multiple windows are opened at one time, i.e., as a cascade of opened windows, and each can be separately accessed. Thus, this portion of Young does not at all relate to the coding and/or transmitting of EPG data in an interleaved manner as claimed, but instead to a manner of *viewing* content on a display.

Applicants' position regarding Young is supported by the language cited by the PTO as follows:

(1) Col. 15, lines 30-35 and 54-56 of Young refer only to the manner in which a user can quickly search and sort a downloaded schedule (the EPG content) so as to display a subset of the schedule—i.e., according to topics, such as comedy, satire, etc., or other preferences that are important to the user. Thus, this portion of Young does not at all relate to the coding and/or transmitting of EPG data in an interleaved manner as claimed.

(2) Col. 18, lines 47-52 of Young refer to the method of updating the EPG. The approach identified by Young is exactly the same type of EPG transmission that the present invention is intended to overcome. The cited text of Young recites: "When update is required, programmable tuner 202 will be tuned automatically to the station or cable channel carrying the data. *After the VBI signal is processed* by CPU, the listing data is stored in schedule memory 232, while the cable channel assignment data is stored in cable-specific RAM memory 238" (emphasis added). This cited text of Young indicates that all of the data is transmitted and, once processed, it is then stored in appropriate memory. This portion of Young does not at all relate to the coding and/or transmitting of EPG data in an interleaved manner as claimed. Instead, this represents one prior approach—with the attendant problem of possible data loss as described in the background of the present application.

For the foregoing reasons, Schein is deficient in teaching or suggesting each and every limitation of the claimed invention, and not even Young overcomes this deficiency of Schein. In particular, the PTO has failed to demonstrate where Schein, alone or evidenced by Young, teaches or suggests a method of coding and/or transmitting EPG data as presently claimed, where program records and the schedule records are coded and/or transmitted in an interleaved manner such that "two successive...program records are separated by one or more schedule records associated with a particular one of the two successive program records *and*,

once transmitted, *at the receiving device, the EPG data is read, parsed and stored as it is being received before the complete reception of the data for the EPG is finished"* (emphasis introduced). Because Young fails to teach the coding and/or transmitting of EPG data in an interleaved manner as claimed, and Schein is likewise deficient in this regard (as acknowledged by the PTO in the March 24, 2008, Office Action at page 3), Schein as evidenced by Young cannot anticipate the presently claimed invention.

At page 2 of the Advisory Action, the PTO also asserts that the advantages of the present invention are not claimed. Applicants disagree with this assertion. As asserted previously, the recited invention allows the processing of received data to be performed "on the fly" as processing can commence once the program data and schedule data for a particular program has been received, and it is not necessary for the receiver to wait until it has received the data for all programs on the EPG and then all corresponding schedule data before processing can begin. This affords significant advantages previously unattained during EPG transmission. One advantage is that the processing can commence quickly upon receipt of the first data and it is not necessary for receipt of all of the data before processing commences; this avoids EPG processing delay. A second advantage is that if the system runs out of memory or crashes, then only the data for the last received program is at risk of being lost rather than all of the program data.

This feature *does* appear in the language of claim 1. In particular, claim 1 recites that once the interleaved EPG data is transmitted, "at a receiving device comprising a processor and a memory, the EPG data is read, parsed and stored in the memory *as it is being received before the complete reception of the data for the EPG is finished* (emphasis introduced)." That is precisely the point of applicants' assertion that the processing of received data can be performed "on the fly." Neither Schein nor Young afford this feature, and therefore the claimed invention is both novel and non-obvious over Schein as evidenced by Young.

For all these reasons, the rejection of claims 1-5, 7, and 8 as anticipated by Schein as evidenced by Young is improper and should be withdrawn.

New claim 10 recites that "upon storing in memory, substantially all stored EPG data is complete for both program records and schedule records." As noted above, Schein teaches separate transmission of information using ID numbers to facilitate the meaningful organization of the information into a database. This approach of Schein would suffer the same drawbacks of prior art transmission procedures identified at pages 1-4 of the present application;

namely, any interruption in data transmission or limited memory would result in many incomplete EPG records. Young, for the reasons noted above, does not overcome this deficiency. Thus, new claim 10 is both novel and non-obvious over Schein as evidenced by Young.

In view of all the foregoing, it is submitted that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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